ATTACHMENT (1)

Description:
Man-Portable Low Probability of Intercept Battlefield Doppler Radar

General
Man-portable
Low power density for human safety
Audio/visual detection alarm
Automatic target tracking

Specifications
Performance
Free space detection range with PD = 90 %, PFA=10-6, moving target
Pedestrian (RCS 1 m2) ≥ 2 km
Vehicle (RCS 10 m2): ≥10 km
Azimuth Accuracy: ≤ 0.5 deg
Range Resolution: ≤ 5 m
Minimum Range: 20 meters

Radar Unit
Output Power: ≤ 1 W output
Horizontal beamwidth: ≤ 3 degrees
Vertical beamwidth: ≤ 8 degrees
Frequency: I/J/Ku-band
Azimuth Scan Angle: ≥ 360 degree
Minimum Scan Sector: ≤ 10 degrees
Scan speed: ≥ 10 degrees /s

System Control Unit
Platform: Ruggedized laptop computer
Data Outputs: Doppler signal for manual classification, Azimuth output via RS232, I and Q data available
Data Input: GPS input
Display Type: PPI and B-scope presentations, Background display of clutter map

Physical Characteristics
Radar Unit Size: 70 W x 50 H x 24 D cm
Radar Units Weight: < 30 kg
System Control Unit Size: 45 W x 5 H x 30 D cm
System Control Unit Weight: < 10 kg

Environmental
Temperature: Operation -31C to +49C, storage -46C to +71C
Relative humidity: Up to 95% at 35C

Power
Power supply: 12 - 24 VDC
Power dissipation: ≤ 75 W

Accessories:
Tripod
Operators Manual
S/W ICD

Contractor Responsibility
- Delivery Schedule: 1 months from order placement
- Listed on Contractor Registry
- Provide cost and supporting data for radar
- Provide specifications for radar

Acceptance Criteria
Verify that all components have been delivered in new condition and are operational